

REMARKS/ARGUMENTS

Claims 1-10 are pending in the present application. It is respectfully requested that the Examiner reconsider the rejections based on the present remarks.

The Examiner rejected claims 1-10 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,298,426 of Inami et al. in view of U.S. Patent 5,559,037 of Kim et al., U.S. Patent 4,284,412 of Hansen et al., U.S. Patent 4,492,752 of Hoffman et al. and newly added Bentley et al., Amer. J. of Clinical Pathology 104 (1), 60-4 (1995) and further in view of U.S. Patent 5,516,695 of Kim et al.

In our previous response dated March 4, 2003, we stated that none of the references previously cited by the Examiner, i.e. Inami et al., Kim et al., Hansen et al., Hoffman et al. and Kim et al., alone or in combination, teaches a method of classifying the lipid particles, leukocyte cells, and erythroid cells of a nucleated bone marrow as claimed in the present invention.

The Examiner now cites newly added Bentley reference in combination with all the previously cited references to reject claims 1-10 as being obvious under 35 U.S.C. 103(a).

Bentley discloses a method of separating leukocytes from fat particles by using a Cobas-Helios analyzer. In the method of Bentley, absorbance and cell size are measured after staining the marrow sample with a dye.

In the present invention, Applicants stains marrow sample with a fluorescent dye and then detects intensities of fluorescence and scattered light.

In the Examiner's opinion, the absorbance based on stained cells of Bentley is comparable to instantly used fluorescence; the cell size based on aperture impedance is comparable to light scattering of the present invention. The Examiner also stated that the scattergram of Bentley is similar to that of the present invention because the same underlying

parameters were being measured, cell type and cell size. Hence, the Examiner stated "Although Bentley et al. use different "observables" in the determination of TNC count than instant method, these are recognized in the art to be functional equivalents to those instantly used. The Examiner did not cite any reference to support his "art recognized equivalents" assertion. Relying on this unsupported "art recognized equivalents" statement, the Examiner concluded that it was proper to combine Bentley to the previously cited references to arrive at the present invention. Applicants respectfully traverse.

In order to rely on equivalents as a rationale supporting an obviousness rejection, the equivalency must be recognized in the prior art, and cannot be based on applicant's disclosure or the mere fact that the components at issue are functional or mechanical equivalents. *In re Ruff*, 256 F.2d 590, 118 USPQ 340 (CCPA 1958); *In re Scott*, 323 F.2d 1016, 139 USPQ 297 (CCPA 1963); *Smith v. Hayashi*, 209 USQ 754 (Bd. of Pat. Inter. 1980). Since there is no support for the "equivalency" statement, the obviousness rejection to the present invention in view of Bentley and other references may only be hindsight reconstruction or "obvious to try" at most.

Applicants believe the observing method of Bentley is not equivalent to that of the present invention for at least the reasons addressed below.

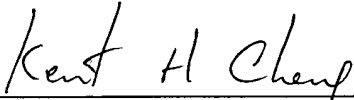
The absorbance method used by Bentley determines the degree of light absorbed by cells and compares it to the degree of light transmitted through cells, by applying light with a certain wavelength to the cells. The fluorescence method in the present invention determines the intensity of fluorescence radiated from the cells. Hence, the theoretical and physical basis of the absorbance method used by Bentley is different from that of the fluorescence method used in the present invention.

Further, contrary to the Examiner's statement, the scattergram of Bentley is not similar to that of the present invention. Lipid particles, leukocytic cells and erythroblastic cells are generally contained in a marrow sample. As shown in Fig. 1 and Fig. 2 of Bentley, although lipid particles and leukocytic cells are classified, erythroblastic cells are not identified. In contrast, as shown in Fig. 2 of the present invention, in addition to lipid particles and leukocytic cells, erythroblastic cells are identified as well. This further indicates that the observing method of Bentley is not equivalent to that of the present invention.

Therefore, based on the above remarks, and further in view of Applicants' previously response dated March 4, 2003, Applicants believe that the present invention is not obvious over Inami et al. in view of Kim et al., Hansen et al., Hoffman et al. and newly added Bentley (1995) and further in view of Kim et al. It is respectfully requested that the rejection of claims 1-10 under 35 U.S.C. 103(a) as being unpatentable over these references be withdrawn. Applicants believe that the pending claims are in condition of allowance. Early notice of such allowance is earnestly requested.

It is believed that no fees or charges are required at this time in connection with the present application; however, if any fees or charges are required at this time, they may be charged to our Patent and Trademark Office Deposit Account No. 03-2412.

Respectfully submitted,
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